In the Claims

1. (Currently Amended) A disc brake rotor having a central hub coaxial with and supporting annular rings which form an inboard brake disc and an outboard brake disc for engagement with brake pads, said inboard disc and said outboard disc maintained in a parallel spaced apart configuration by pillars with channels defined between said pillars whereby in use of the rotor, air is drawn in through vent means and then radially outwardly through said channels as the rotor turns, said pillars arranged in repeating clusters of six; said pillars in cross section including radially aligned inner and outer pillars with pairs of intermediate pillars positioned radially between said inner and outer pillars; one pair of said intermediate pillars on each side of a radially aligned central axis defined by said radially aligned inner and outer pillars; said pairs of intermediate pillars positioned to support said inboard and outboard brake discs against mechanical distortion from application of said brake pads during heavy braking; each pair of said pairs of radially aligned intermediate pillars defining a channel between the pillars comprising said pair; said channel offset from a radially aligned direction.

2. (Previously Presented) The disc brake rotor as claimed in claim 1 wherein sides of said central hub are inclined outwardly towards a base of said central hub and an outer periphery of said central hub leads into a heat dam.

3. (Previously Presented) The disc brake rotor as claimed in claim 2 wherein said vent means include inlet vents on an outboard side located in an outer face of said heat dam.

4. (Previously Presented) The disc brake rotor as claimed in claim 3 wherein said vent means further include inlet vents on an inboard side of said rotor.

5. (Previously Presented) The disc brake rotor as claimed in claim 4 wherein ports for said inlet vents on the inboard side of said rotor are located between an inner periphery of one of said rings and a contoured inlet horn formed by an inboard face of said central hub.

6. (Previously Presented) The disc brake rotor as claimed in claim 5 wherein said inlet vents on said inboard and said outboard sides of ~~the~~ said rotor lead into said channels between said rings, said channels being defined by said pillars.

7. (Previously Presented) The disc brake rotor as claimed in claim 6 wherein said pillars are arranged in clusters with each cluster being symmetrical with respect to rotational directions of said rotor.

8. (Previously Presented) The disc brake rotor as claimed in claim 7 wherein each cluster defines a respective pair of said channels and cooling air passes equally through one or another thereof in accordance with direction of rotor rotation.

9. (Previously Presented) The disc brake rotor as claimed in claim 8 wherein each cluster includes pillars which in cross-section are of elongated triangular shape and have overlapping edges to define said pair of said channels.

10. (Previously Presented) The disc brake rotor as claimed in claim 9 wherein said inner pillars of each of said clusters have an elongated diamond shape in cross-section and alternate with pillars which are triangular or bell shaped in cross-section, said inner pillars being adapted to deflect and draw cooling air from said inlet vents into said channels.

11. (Original) The disc brake rotor as claimed in claim 1 wherein said repeating clusters of six pillars are circumferentially disposed between said annular rings at angular intervals of 20 degrees.

12. (Previously Presented) The disc brake rotor as claimed in claim 11 wherein each outer pillar of said radially aligned inner and outer pillars is in a cross section form approximating that of an isosceles triangle; a base of said triangle adjacent to an outer periphery of said annular rings.

13. (Currently Amended) The disc brake rotor as claimed in claim 12 wherein each inner pillar of said radially aligned inner and outer pillars is in cross section of oviform or diamond shape~~;~~ , a long axis of said oviform shape or said diamond shape is radially aligned.

14. (Original) The disc brake rotor as claimed in claim 13 wherein each adjoining pair of said repeating clusters of six pillars is symmetrical about a line defined by an intermediate radially aligned inner pillar and outer pillar.

15. (Previously Presented) The disc brake rotor as claimed in claim 14 wherein said outer pillar is of a cross section form approximating that of a tear drop; a base of said tear drop coincident with said outer periphery of said annular rings.

16. (Currently Amended) The disc brake rotor as claimed in claim 15 wherein each inner pillar of said radially aligned intermediate pillars is in cross section of a form approximating that of a bell~~;~~, ~~the~~ a base or mouth of said bell adjacent to ~~said~~ an inner periphery of said annular rings.

17. (Original) The disc brake rotor as claimed in claim 16 wherein each said cluster of six pillars includes two symmetrically opposed pairs of intermediate pillars; each pair of said opposed pairs of intermediate pillars defining an air flow channel adapted to dissipate heat from surrounding regions of said discs.

18. (Previously Presented) The disc brake rotor as claimed in claim 1 wherein said repeating clusters of six pillars are circumferentially disposed between said annular rings at angular intervals of 10 degrees; adjoining pairs of clusters overlapping so as to share a pair of said radially aligned intermediate pillars.

19. (Previously Presented) The disc brake rotor as claimed in claim 13 wherein each outer pillar of said radially aligned inner pillar and outer pillar is in cross section form approximating that of an isosceles triangle with rounded base; said base adjacent to an

outer periphery of said annular rings.

20. (Currently Amended) The disc brake rotor as claimed in claim 13 wherein alternate ones of inner pillars of said radially aligned inner pillar and outer pillar are in cross section of either oviform, ~~or~~ diamond shape ~~and~~ or bell shape.

21. (Previously Presented) The disc brake rotor as claimed in claim 20 wherein patterns of air flow are induced by rotation of said rotor; said air flow directed from an inner periphery of said rings through channels between selected pillars of said repeating clusters of pillars to exit from said rotor at said outer periphery of said rings.

22. (Previously Presented) The disc brake rotor as claimed in claim 21 wherein said patterns of air flow are predetermined by direction of rotation of said rotor; a clockwise rotation determining a first pattern of said air flow and an anticlockwise rotation determining a second pattern; said second pattern being mirror reversed from said first pattern.

23. (Canceled)

24. (Canceled)